Amendments to the claims:

Please cancel claim 1 and add new claims 25-31 as indicated below. The following listing of claims replaces all prior versions of the claims in this application.

Claims 1-24 (Canceled)

(New) A process for preparing, by electrochemical reduction, a carbon-containing material whose surface is modified with organic groups, which comprises placing the carbon-containing material in contact with an organic diazonium salt in solvent, optionally in the presence of an electrolyte, and negative polarization of the carbon-containing material relative to an anode which is also in contact with the solution of the organic diazonium salt or in contact with an electrolytic solution which is separate from the solution of the salt, wherein the electrochemical reduction is carried out on the organic diazonium salt in protic solvent in acidic medium, and wherein the organic diazonium salt is

4-nitrobenzenediazonium tetrafluoroborate, 3,3'-dimethoxybiphenyl-4,4'-bis(diazonium) dichloride of the following formula:

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4-carboxymethylbenzenediazonium tetrafluoroborate, 1,4-benzenebis(diazonium) tetrafluoroborate, chlorobenzyl-4-diazonium tetrafluoroborate, or

4-chloromethylphenyldiazonium, 4-hydroxymethylphenyldiazonium,

- 4-carboxyphenyldiazonium, 4-formylphenyldiazonium, 4-acetylphenyldiazonium,
- 4-isothiocyanatophenyldiazonium, 4-N-FMOC-aminomethylphenyldiazonium,
- 4-(4-hydroxymethyl)phenyldiazonium, 4-(2,4-dimethoxyphenyl-N-FMOC-aminomethyl)phenyldiazonium, 4-(phenyl-N-FMOC-aminomethyl)phenyl-diazonium,
- 4-(4-methylphenyl-N-FMOC-aminomethyl)phenyldiazonium or
- 4-(4-nitrophenylcarbonyl)phenyldiazonium salt, or





trityldiazonium chloride, 2-chlorotrityldiazonium chloride or trityldiazonium hydroxide, or

9-N-FMOC-aminoxanthen-3-yldiazonium, 4-(2,4-dimethoxyphenylhydroxymethyl)phenyldiazonium, 4-(4-hydroxymethylbenzoyloxymethyl)phenyldiazonium, 4-(4-hydroxymethylbenzoylaminomethyl)phenyldiazonium or 4-(4-hydroxymethyl-3-methoxyphenoxymethyl)phenyldiazonium salt.

26. (New) A process for preparing, by electrochemical reduction, a carbon-containing material whose surface is modified with organic groups, which comprises placing the carbon-containing material in contact with an organic diazonium salt in solvent, also in the presence of an electrolyte, and negative polarization of the carbon-containing material relative to an anode which is also in contact with the solution of the organic diazonium salt or in contact with an electrolytic solution which is separate from the solution of the salt, wherein the electrochemical reduction is carried out on the organic diazonium salt in protic solvent in acidic medium.

(New) A process as claimed in claim 26, wherein the electrolyte comprises quaternary ammonium salts or alkali metal salts.

28. (New) A process as claimed in claim 28, wherein the electrolyte comprises quaternary ammonium or alkaline halides, acetates, tetrafluoroborates, perchlorates or hexafluorophosphates.

(New) A process as claimed in claim 26, wherein the electrolyte comprises lithium tetrafluoroborate or (C₁-C₄) alkylammonium tetrafluoroborate.

(New) A process as claimed in claim 26, wherein the electrolyte comprises tetraethylammonium tetrafluoroborate.

(New) A process as claimed in claim 26, wherein the electrolyte comprises hydrochloric acid, sulphuric acid, nitric acid, nitrous acid, phosphoric acid or tetrafluoroboric acid.



